Name: HW\_58\_ExponentProductQuotient

*Mr. Tiénou-Gustafson & Mr. Bielmeier*

Geometry, Period

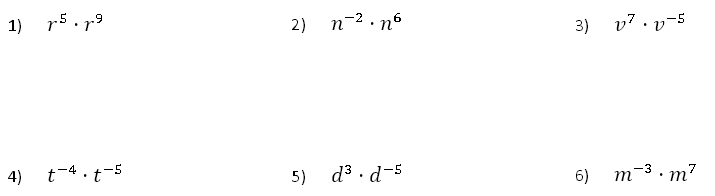
Due Date: Nov 19, 2014

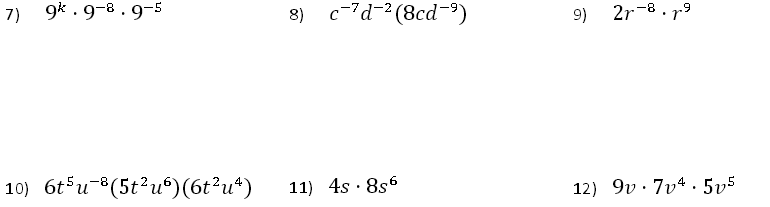
**Geometry**

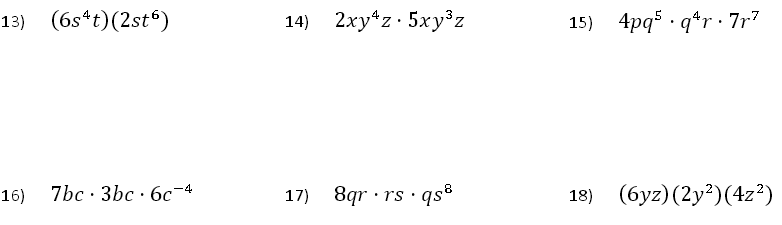
**Homework**



**Simplify the following:**







|  |  |  |  |
| --- | --- | --- | --- |
| 1. Write an expression equivalent to | 2. Find the missing exponent to make the statement true: | 3. Find the missing exponent to make the statement true: | 4. Find the missing exponent to make the statement true: |
| 5. Write three expressions involving quotients that are equivalent to | 6. Simplify the expression: | 7. Simplify the expression: | 8. Simplify the expression: |
| 10. The luminosity (in watts) of a start is the total amount of energy emitted from the star per unit of time. The order of magnitude of the luminosity of the sun is watts. The star Canopus is one of the brightest stars in the sky. The order of magnitude of luminosity of Canopus is . How many times more luminous is Canopus than the sun? | | 11. A microscope has two lenses, the objective lens and the eyepiece, that work together to magnify an object. The total magnification of the microscope is the product of the magnification of the objective lens and the magnification of the eyepiece.   1. Your microscope’s objective lens magnifies an object 10^2 times, and the eyepiece magnifies an object 10 times. What is the total magnification of your microscope? 2. You magnify an object that is 10^2 meters long. How long is the magnified image? | |